



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,995	02/28/2005	Markus Dillinger	1454.1600	2832

21171 7590 09/13/2005

STAAS & HALSEY LLP  
SUITE 700  
1201 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

EXAMINER

KARIKARI, KWASI

ART UNIT	PAPER NUMBER
----------	--------------

2686

DATE MAILED: 09/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/525,995

Applicant(s)

DILLINGER ET AL.

Examiner

Kwasi Karikari

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 14-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 22 and 23 is/are allowed.
- 6) ☒ Claim(s) 14-21 and 24-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 14,15,16,17,25 and 26 are rejected under 35 U.S.C.102 (b) as being unpatentable over Hoffman (U.S. 6,622,017), (hereinafter Hoffman).**

Regarding **claim 14**, Hoffman discloses a method for operating a terminal device (mobile terminal, Fig. 2, item 5) in a radio communication system (Fig. 2, item 3), comprising:

authorizing operation of the terminal device in the radio communication system only upon confirmation that the terminal device will be checked for proper functional integrity during operation (user of handset 5 initiates a call to the inter-working function (IWF), via the base station and the mobile switch center, and the handset 5 is validated after a handshake process has been completed, see col. 8, line 66- col. 9, line 10 and Fig. 2, item).

Regarding **claim 15**, Hoffman discloses the method according to claim 14, wherein said authorizing operation of the terminal device in the communication system includes;

Art Unit: 2686

sending a confirmation signal to the terminal device (a handshake process is performed to validate the handset 5 or the individual user, see col. 9, lines 1-10), and wherein said method further comprises;

responding to receipt of the confirmation signal by the terminal device being checked during operation (mobile phone 5 monitor the paging and control channel for a command, and transmits an acknowledgement upon receiving any message that is addressed to the mobile station 5, see col. 12, lines 4-18).

Regarding **claim 16**, Hoffman discloses the method according to claim 15, further comprising:

sending a request signal from the terminal device to a confirmation unit prior to said authorizing operation of the terminal device in the communication system, and initiating checking of the terminal device by the confirmation unit in response to the request signal, and wherein said sending of the confirmation signal to the terminal device is performed by the confirmation unit after said checking (to make a routine call, the user handset sends signaling message the base station, via the air interface, for call set-up process by the network, see col.14, lines 33-42).

Regarding **claim 17**, Hoffman's teaching of wireless terminal transmitting URL and the transmission utilization of a channel previously allocated to a session between the handset 5 and the IWF equipment may trigger set-up of a new link through the network for message transmission (see col. 14, lines 43-57), meets the limitations, according to claim 16, of storing an address of the confirmation unit in the terminal device and in a large number of terminal devices at least in the communication system,

and wherein said sending the request signal to the confirmation unit includes the terminal device using the address of the confirmation unit stored previously in the terminal device.

Regarding **claim 25**, Hoffman discloses a terminal device for a radio communication system having a confirmation unit, comprising:

a receive device receiving a confirmation signal from the confirmation unit of the communication system, indicating that that said terminal device will be checked for proper functional integrity during operation in the communication system (handset 5 includes a digital transceiver 57, see col. 11, line 58- col. 12, line 3) ; and

a deactivation device only permitting further operation of said terminal device if said receive device has received the confirmation signal (mobile terminal 5, upon initialization, receives paging channels and control channels for a command, and transmits acknowledgement upon receiving any message address to mobile terminal 5, see col. 12, lines 4-18 and Fig. 2).

Regarding **claim 26**, Hoffman discloses a confirmation unit for a radio communication system having at least one terminal device (MSC, see Fig. 2), comprising:

a device generating a confirmation signal, from which it can be inferred that the at least one terminal device will be checked for proper functional integrity during operation in the communication system (authentication at HLR, see col. 8, lines 29-41); and a transmit device sending the confirmation signal to the terminal device (devices

Art Unit: 2686

including base station 13, mobile switch center 11 and inter-working function 19 are involved performing the authentication process, see col. 7, lines 30-40 and Fig. 3).

**Claim 24 is rejected under 35 U.S.C.102 (b) as being unpatentable over Numminen et al. (U.S. 6,813,496), (hereinafter Numminen).**

Regarding **claim 24**, Numminen discloses a radio communication system comprising:

a confirmation unit, including a signal generation device generating a confirmation signal (ILR sends a signal back to MTS indicating whether the location update request is from a company or a visitor, see col. 6, lines 1-10); and

a transmit device sending the confirmation signal and a terminal device, including a receive device receiving the confirmation signal indicating that said terminal device will be checked for proper functional integrity during operation (MTS indicate that location update is from a company and then location update is allowed to attach to the BTS, see col. 6, lines 11-21); and

a deactivation unit only permitting further operation of said terminal device if said receive device has received the confirmation signal (MTS sends appropriate signal to IMC which prevents the BTS from allowing the phone to attach to it, see col. 6, lines 22-39).

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 18 is rejected under U.S.C. 103(a) as being unpatentable over Hoffman in view of Jasinski (U.S. 5,239,677), (hereinafter Jasinski).**

Regarding **claim 18**, as applied to claim 17 above, Hoffman discloses the claimed limitations, but fails to teach that the method comprises registering the terminal device with the communication network, and wherein said sending of the request signal by the terminal device only occurs after a predefined period of time has elapsed following said registering and the terminal device has not automatically received the confirmation signal.

Jasinski teaches a portable transceiver communicating with other portable transceivers, via a base site, in communication system, see col. 1, lines 50-54). Jasinski further discloses that the portable transceiver receives control signal after it has turned on it's power, waits for a response from the base site after the transceiver has sent a call initiation signal to the base site and the base site also waits to receive valid call initiation from the transceiver before assigning call initiation frequency (see col. 5, line 39- col. 6, line 20).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Jasinski into the system of Hoffman for the benefit of achieving

a communication system that assigns call initiation channels to the communication entities after valid call initiation signal has been received at the base site to improve error rate.

**Claim 19 is rejected under U.S.C. 103(a) as being unpatentable over Hoffman in view of Jasinski and further in view of Akgun et al., (U.S. 20040029585 A1), (hereinafter Akgun).**

Regarding **claim 19**, as applied to claim 18 above, Hoffman and Jasinski discloses the claimed limitations, but fail to teach that a plurality of devices are capable of performing said checking of the terminal device for proper functional integrity during operation, and wherein said method further comprises determining, prior to said checking, which of the devices is performing said checking of the terminal device.

Akgun teaches that the authentication of the mobile node 12 may be done through a variety of way and if a server is not available to authenticate the mobile node, the responsibility is shifted to another authentication server (see Page 3, line 0027 and Fig. 1).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Akgun into the system of Jasinski and Hoffman for the benefit of achieving an authentication system that is could shift authentication task among other servers in the system.

**Claim 20 is rejected under U.S.C. 103(a) as being unpatentable over Hoffman in view of Jasinski and and further in view of Akgun and further in view of Official Notice.**

Regarding **claims 20**, the combination of Hoffman, Jasinski and Akgun discloses the claimed limitations, but fails to explicitly teach the method as recited in claim 19, wherein said determining of which device is performing said checking includes locating one of the devices in closest possible proximity to the terminal device.

However, the examiner takes an official notice of the fact that it was well known to use the closest base station, with the strongest signal strength among order base station, to perform authentication process via a mobile switch center.

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Akgun into the system of Jasinski and Hoffman for the benefit of achieving an authentication system in the communication network.

**Claim 21 is rejected under U.S.C. 103(a) as being unpatentable over Hoffman in view of Jasinski and further in view of Akgun and further in view of Office notice and further in view of Buytaert et al., (U.S. 6,198,919), (hereinafter Buytaert).**

Regarding **claim 21**, the combination of Akgun, Jasinski and Hoffman as applied to claim 20 above, discloses the claimed limitations, but fails to teach that the terminal device performs said checking and wherein said method further comprises delivering software needed for performing said checking, to the terminal device via a wireless interface.

Buytaert teaches an object 11 that communicates with the service center 15, and the service center produce authentication and cryptographic (see col. 8, lines 30-54

and Fig. 4). Buytaert further discloses that processor 25 has self test software function that is run periodically and report any detected error to the service center (see col. 15, lines 46-55).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Buytaert into the system of Akgun, Jasinski and Hoffman for the benefit of achieving a system that could performs self test using embedded or downloaded software.

**Claim 22 and 23 is rejected under U.S.C. 103(a) as being unpatentable over Hoffman in view of Jasinski and further in view of Akgun and further in view of Office notice and further in view of Buytaert et al and further in view of Olkkonen et al. (U.S. 6,842,460), (hereinafter Olkkonen).**

Regarding **claim 22**, the combination of Akgun, Jasinski, Hoffman and Buytaert as applied to claim 21 above, discloses the claimed limitations, but fails to teach that checking of the terminal device, includes checking signals to be transferred by the terminal device for compliance with at least one quality criterion having value dependent on where the terminal device is situated within the radio communication system.

Olkkonen teaches that members of an ad hoc networks join and leave as they move into and out of the range of the devices in the network (see col. 39, lines 9-19).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Olkkonen into the system of Buytaert, Akgun, Jasinski and Hoffman for the benefit of achieving an ad hoc networks in which communication between devices is possible for devices that are closer each other.

Regarding **claim 23**, the combination of Akgun, Jasinski, Hoffman and Buytaert as applied to claim 22 above, discloses the claimed limitations, but fails to teach that refusing operation of the terminal device in the communication system after said authorizing of the terminal device for operation only if said checking of the terminal device has yielded one of a predetermined number of errors and an error exceeding a threshold value.

Olkkonen teaches that and ad hoc networks is rated by the number of received signal quality including bit error rate accumulated over time, clear channel assessment, interference and collision per unit time (see col. 24, line 48- col. 25, line 9).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Olkkonen into the system of Buytaert, Akgun, Jasinski and Hoffman for the benefit of achieving an ad hoc networks in quality of the signal characteristics could be measured.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Krishnamurthi et al., (20010023186 A1) teaches a system and method for base station initiated call setup.

Osborne (6,088,588) teaches a method and wireless terminal for monitoring communications and providing network with terminal operation information.

Holur (20040038689 A1) teaches a system and method for communication service portability.


Art Unit: 2686

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwasi Karikari whose telephone number is 571-272-8566. The examiner can normally be reached on M-F (8 am - 4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on 571- 272 5905. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kwasi Karikari  
Patent Examiner.

  
CHARLES APPIAH  
PRIMARY EXAMINER